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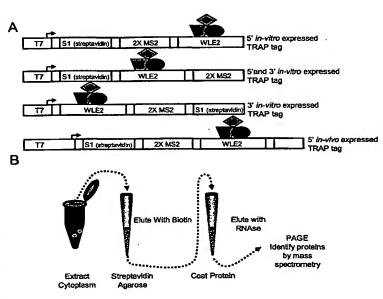
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(54) Title: TRAP-TAGGING: A NOVEL METHOD FOR THE IDENTIFICATION AND PURIFICATION OF RNA-PROTEIN COMPLEXES



(57) Abstract: Conventional methods for the isolation and identification of specific RNA-protein complexes are plagued by a number of problems not encountered in genomics or proteomics. Here we describe a two step affinity purification method used to isolate RNA-protein complexes. The TRAP (Tandem RNA Affinity Purification) tag is a dual RNA tagging system that facilitates gentle purification of RNA molecules along with the proteins, RNAs and other small molecules specifically associated with them.

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S1 (Streptavidin Binding) Aptamer Tag

AGATCTCATGATANANGACCGACCAGATCAGCAGCTGCGTAAGATAGTCGCGGGCCCGGANANATAGTCGAT

Bgfl Ciel Spacer 2x MS2 (Coat Protein Binding) Aptamer Teg spacer Ciel

GAATTOGLIGOTOAAAAAGAACATTAGAAACATTAGGAATCACCCATGTCTGCAGGTCGACTCTAGAAACATGAGGATACCA

EcoRI Ssfl spacer

POTCTGCAGOTCAAAAGAGCTCGGTACCCGGGGATCC

spacer Ssti Kpni BamHi



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